Field Oversight Activities Report (24 June 2010)

Gulfco Marine Maintenance Site
Freeport, Brazoria County, Texas
EPA Identification No. TXD055144539

Remedial Action Contract 2 Full Service
Contract: EP-W-06-004
Task Order: 0006-RICO-06JZ

Prepared for

U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Prepared by

EA Engineering, Science, and Technology, Inc.
405 S. Highway 121
Building C, Suite 100
Lewisville, Texas 75067
(972) 315-3922

July 2010
EA Project No. 14342.06

1.0 INTRODUCTION

This Field Oversight Activities Report summarizes remedial investigation/feasibility study (RI/FS) oversight activities conducted on 24 June 2010 at the Gulfco Marine Maintenance (Gulfco) Superfund site, located in Freeport, Brazoria County, Texas. As requested by the U.S. Environmental Protection Agency (EPA), EA Engineering, Science, and Technology, Inc. (EA) performed oversight of sediment sampling activities conducted by the potentially responsible party (PRP)'s primary consultant, Pastor, Behling & Wheeler, LLC (PBW). Additionally, EA obtained four split samples of sediment, as directed by Mr. Gary Miller, EPA Task Order Monitor.

During field oversight activities, EA is required to evaluate and document PRP performance of field work and confirm PRP adherence with applicable standard operating procedures (SOPs) and the following EPA-approved documents:

- URS's Final Baseline Ecological Risk Assessment Work Plan and Sampling and Analysis Plan (URS 2010)
- PBW's Memorandum: "Advance Notice of Proposed Supplemental Wetland Sediment Sampling and Related Activities, Gulfco Marine Maintenance Site, Freeport, Texas." (PBW 2010).

Section 2 summarizes oversight and split sampling activities associated with the 24 June 2010 wetlands sediment sampling event.

2.0 SEDIMENT SAMPLING ACTIVITIES

Wetland sediment sampling activities performed by PBW included (1) marking the proposed sample locations with a global positioning system (GPS) unit; (2) field screening anticipated sample locations with an X-ray fluorescence (XRF) spectrometer for zinc concentrations to modify sample locations, as needed, and determine which samples will be submitted for laboratory analyses, and (3) collection of sediment samples for laboratory analyses. The following subsections discuss these activities in greater detail.

2.1 Oversight of Wetland Sediment Sampling Locations

On 24 June 2010, EA conducted oversight of wetland sediment sampling activities performed by PBW and collected split samples as directed by EPA. Participants included:

- Mr. Eric Pastor, PBW
- Mr. Tim Nichols, PBW
- Mr. Len Mason, PBW
- Mr. Duane Thomas, EA Environmental Scientist.

At 0823 hours, while in transit to the site, EA received a phone call from Mr. Pastor with PBW that a replacement GPS unit had not yet arrived at the site, and that EA would be on stand-by until the new unit arrived in Lake Jackson, Texas.

At 0905 hours, EA received a phone call from PBW that the replacement GPS had arrived and PBW would proceed with marking sample locations. At 0950 hours, EA arrived at the Gulfco site, and met with Mr. Pastor at 1000 hours.

At 1020 hours, EA and the field crew mobilized to sediment sample locations to initiate sample collection. The sediment samples were collected to a depth of six inches below existing surface grade, using dedicated, pre-cleaned, disposal poly sampling trowels. In the case of samples designated for split sampling, the sediment sample was placed in a stainless steel bowl, homogenized, and then scoops of the sample were alternately placed in the sample containers utilized by PBW, and those used for the split samples collected by EA. The following Table 1 provides a summary of wetland samples collected by PBW, as well as spilt samples collected by EA.

TABLE 1 SUMMARY OF WETLAND SEDIMENT SAMPLES (24 JUNE 2010)

Original Proposed Location	Sample Location	Sample Time	EA Split Sample Location
5WSEDA-3	----	----	----
5WSEDA-4	----	----	----
----	5WSEDA-5	10:51	----
5WSEDA-6	5WSEDA-6	10:42	----
----	5WSEDA-7	10:26	----
----	5WSEDA-8	10:32	----
----	5WSEDA-9	10:37	----
5WSEDA-10	5WSEDA-10	11:00	5WSEDA-10
----	5WSEDA-11	11:10	----
	5WSEDB-1	----	----
	5WSEDB-2	11:30	----
5WSEDB-3	5WSEDB-3	11:35	----
5WSEDB-4	5WSEDB-4	11:50	----
	5WSEDB-5	11:53	----
5WSEDB-6	5WSEDB-6	12:00	5WSEDB-6
	5WSEDB-7	12:10	----
5WSEDB-8	5WSEDB-8	12:15	----
	5WSEDB-9	12:20	----
5WSEDC-1	5WSEDC-1	12:40	----
5WSEDC-2	5WSEDC-2	12:45	----
5WSEDC-3	5WSEDC-3	12:50	----
	5WSEDC-4	13:14	----
5WSEDC-5	5WSEDC-5	13:07	----
	5WSEDC-6	13:23	----
5WSEDD-1	----	----	----
5WSEDE-1	5WSEDE-1	14:15	----
5WSEDE-2	5WSEDE-2	14:20	----
5WSEDE-3	5WSEDE-3	14:30	----
5WSEDE-4	----	----	----
5WSEDE-5	5WSEDE-5	14:45	5WSEDE-5
5WSEDE-7	----	----	----
5WSEDF-1	5WSEDF-1	13:30	----
5WSEDF-2	5WSEDF-2	13:45	5WSEDF-2

As documented Table 1, PBW originally proposed 21 sediment sample locations. Based on collected field data, a portion of the sample locations were modified during the 24 June 2010 sampling event, resulting in 27 sediment sample locations. Field work and sampling activities were completed by PBW as proposed. PBW had also indicated that they would provide a copy of the calibration data for the XRF spectrometer. However, to date, this information has not been provided to EA.

Figures 1 through 6 (Appendix A) document field sampling activities conducted during the sediment sampling event. Sample location 5WSEDB-1 was originally planned as a sample location, but was abandoned due to PBW encountering road base material at this sample location. PBW also collected quality control samples from locations 5WSEDC-3 and 5WSEDE-3, and collected a rinsate blank and field blank at 1450 hours.

As documented Table 1, EA collected four split samples as part of field oversight activities. A chain of custody for these samples was completed for the samples, with the specified analytes being poly aromatic hydrocarbons by EPA Method 8270 C (samples 5WSEDA-10, and 5WSEDE-5) and zinc by EPA Method 6010B/6020 (samples 5WSEDA-10, 5WSEDB-6, and 5WSEDF-2). The samples collected by EA were labeled, packed in an ice-chilled cooler, and the chain of custody for the samples were placed in the cooler in a Ziploc bag, prior to sealing and placing custody seals on the cooler.

At 1600 hours, EA demobilized from the site. At 1630 hours, EA relinquished the sample cooler to FedEx for overnight shipment to its non-team subcontractor laboratory, TestAmerica Analytical Laboratories (Austin, Texas).

REFERENCES

Pastor, Behling & Wheeler, LLC (PBW). 2005. "Remedial Investigation and Feasibility Study (RI/FS) Work Plan for the Gulfco Marine Maintenance Superfund Site, Freeport, Texas." May.

PBW. 2006. "Sampling and Analysis Plan – Volume 1. Field Sampling Plan for the Gulfco Marine Maintenance Superfund Site, Freeport, Texas." May.

PBW. 2010. Memorandum to Mr. Gary Miller, U.S. Environmental Protection Agency (U.S. EPA): "Advance Notice of Proposed Supplemental Wetland Sediment Sampling and Related Activities, Gulfco Marine Maintenance Site, Freeport, Texas." 18 June.

URS Corporation. 2010. "Final Baseline Ecological Risk Assessment Work Plan & Sampling and Analysis Plan for the Gulfco Marine Maintenance Superfund Site, Freeport, Texas." May.

Appendix A

Photographs

Photograph 1 Date: 24 June 2010
Site: Gulfco Marine Maintenance Superfund Site
Description: 5WSEDA-6 sediment sample collection

Photograph 2 Date: 24 June 2010
Site: Gulfco Marine Maintenance Superfund Site
Description: 5WSEDA-10 sample homogenization

Photograph 3 Date: 24 June 2010
Site: Gulfco Marine Maintenance Superfund Site
Description: 5WSEDB-4 field XRF analysis for zinc

Photograph 4 Date: 24 June 2010
Site: Gulfco Marine Maintenance Superfund Site
Description: 5WSEDB-6 sample homogenization

Photograph 5 Date: 24 June 2010
Site: Gulfco Marine Maintenance Superfund Site
Description: 5WSEDE-2 sediment sample collection

Photograph 6 Date: 24 June 2010
Site: Gulfco Marine Maintenance Superfund Site
Description: 5WSEDE-5 collection and homogenization